

Free Sat (2024) Questions

Math

Question: If $2x - y = 8$, and $x + 3y = 10$, what is the value of x ?

Answer: 4

Question: The sum of three consecutive odd integers is 57. What are the integers?

Answer: 19, 21, 23

Question: If a right triangle has legs of lengths 3 and 4, what is the length of the hypotenuse?

Answer: 5

Question: Simplify: $(2x^2 - 3x + 1) + (x^2 + 2x - 5)$

Answer: $3x^2 - x + 4$

Question: If the average of five numbers is 20, what is the sum of the numbers?

Answer: 100

Question: The length of a rectangle is 5 cm more than its width. If the width is w , what is the length?

Answer: $w + 5$

Question: If $f(x) = 2x^2 - 4x + 1$, what is $f(3)$?

Answer: 20

Question: Solve for x : $|2x - 7| = 5$

Answer: 6

Question: The sum of an integer and twice its square is 20. What is the integer?

Answer: -1

Question: If $4y + 7 = 19$, what is the value of y ?

Answer: 4

Question: What is the value of $\sqrt{16 + \sqrt{9}}$?

Answer: 4

Question: The area of a trapezoid is given by $A = (1/2)(a + b)h$. If $a = 8$, $b = 12$, and $h = 6$, what is the area?

Answer: 48

Question: If $2p - 5 = 7$, what is the value of p ?

Answer: 5

Question: Simplify: $\frac{3}{5} + \frac{4}{7}$

Answer: $\frac{29}{35}$

Question: The ratio of the length to the width of a rectangle is 3:2. If the width is 10 cm, what is the length?

Answer: 18 cm

Question: If $2(x - 3) = 8$, what is the value of x ?

Answer: 5

Question: The sum of three consecutive integers is 72. What are the integers?

Answer: 23, 24, 25

Question: If $3^a = 81$, what is the value of a ?

Answer: 4

Question: What is the volume of a cylinder with radius 4 cm and height 10 cm?

Answer: $120\pi \text{ cm}^3$

Question: Solve for y : $\frac{2y}{3} = 12$

Answer: 12

Question: If $5x + 3 = 18$, what is the value of x ?

Answer: 3

Question: What is the value of $2^5 * 3^3$?

Answer: 864

Question: If the diagonal of a square is 10 cm, what is the length of one side?

Answer: 7 cm

Question: The sum of two numbers is 15, and their difference is 5. What are the numbers?

Answer: 7, 8

Question: Simplify: $\sqrt{\frac{25}{9}}$

Answer: $\frac{2}{3}$

Question: If $3x + 2y = 12$ and $2x - y = 8$, what is the value of x ?

Answer: 4

Question: The length of a rectangle is 8 cm less than twice its width. If the width is w , what is the length?

Answer: $2w - 8$

Question: If $a + b = 15$ and $a - b = 3$, what is the value of a ?

Answer: 9

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